10696478

```
=> d his

     (FILE 'HOME' ENTERED AT 11:56:01 ON 12 MAY 2004)

     FILE 'REGISTRY' ENTERED AT 11:56:13 ON 12 MAY 2004
L1                STRUCTURE UPLOADED
L2              0 S L1
L3             16 S L1 SSS FULL

     FILE 'CAPLUS' ENTERED AT 11:57:11 ON 12 MAY 2004
L4              2 S L3

     FILE 'REGISTRY' ENTERED AT 12:34:25 ON 12 MAY 2004
L5                STRUCTURE UPLOADED
L6              1 S L5
L7             18 S L5 SSS FULL
L8              2 S L7 NOT L3

     FILE 'CAPLUS' ENTERED AT 12:35:33 ON 12 MAY 2004
L9              2 S L8
L10             0 S L9 NOT L4

=> d l1
L1 HAS NO ANSWERS
L1                STR
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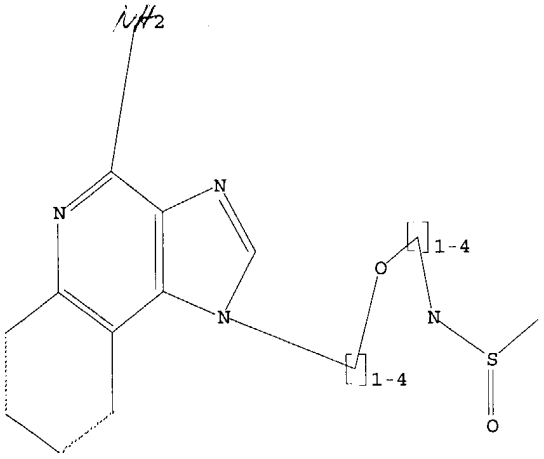

Structure attributes must be viewed using STN Express query preparation.

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=> d l5
L5 HAS NO ANSWERS
L5                STR
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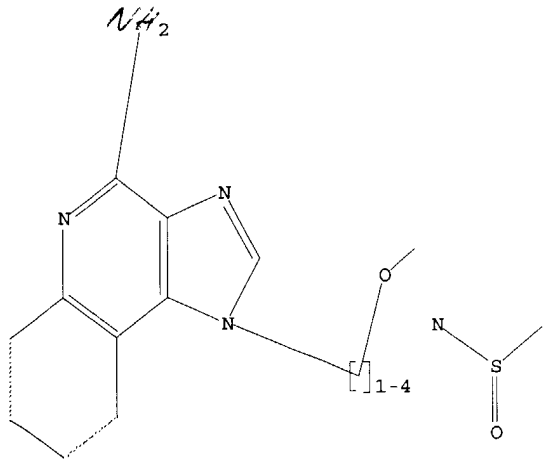
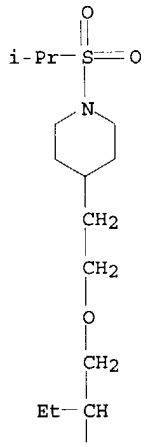


Structure attributes must be viewed using STN Express query preparation.

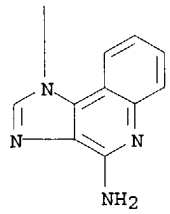
=> d scan l8
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y

L8 2 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-1-[(1-methylethyl)sulfonyl]- (9CI)
MF C24 H35 N5 O3 S

PAGE 1-A



PAGE 2-A

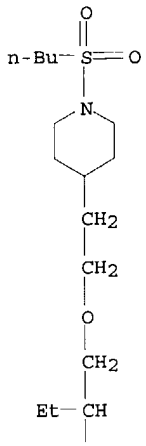


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

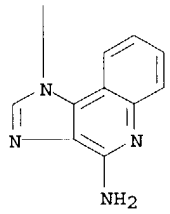
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L8 2 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Piperidine, 4-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butoxy]ethyl]-1-(butylsulfonyl)- (9CI)
MF C25 H37 N5 O3 S

PAGE 1-A



PAGE 2-A



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10696478

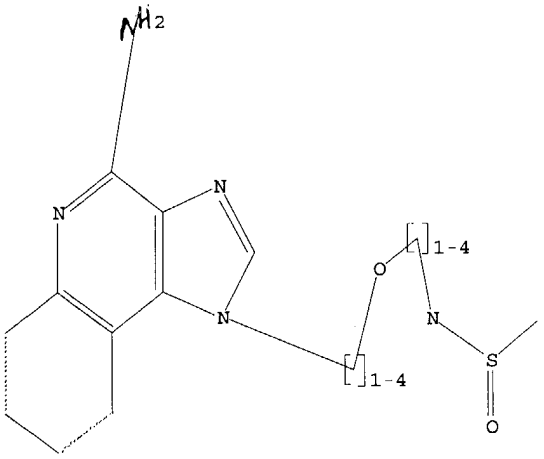
=> d his

(FILE 'HOME' ENTERED AT 11:56:01 ON 12 MAY 2004)

FILE 'REGISTRY' ENTERED AT 11:56:13 ON 12 MAY 2004
L1 STRUCTURE UPLOADED
L2 0 S L1
L3 16 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 11:57:11 ON 12 MAY 2004
L4 2 S L3

=> d l1
L1 HAS NO ANSWERS
L1 STR



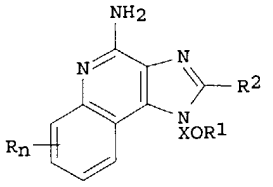
Structure attributes must be viewed using STN Express query preparation.

=> d 1-2 bib abs hitstr

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:570648 CAPLUS
DN 139:133563
TI Preparation of sulfonamidoalkoxyalkylimidazoquinolines as immune response modulators.
IN Crooks, Stephen L.; Griesgraber, George W.; Heppner, Philip D.; Merrill, Bryon A.; Roberts, Ralph R.; Wei, Ai-Ping
PA 3M Innovative Properties Co., USA
SO U.S. Pat. Appl. Publ., 46 pp., Cont.-in-part of U.S. Ser. No. 12,599.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003139441	A1	20030724	US 2002-165443	20020607
	US 6677347	B2	20040113		
	US 2002193396	A1	20021219	US 2001-12599	20011201
	US 6683088	B2	20040127		
	US 2004072858	A1	20040415	US 2003-675833	20030930
PRAI	US 2000-254218P	P	20001208		
	US 2001-12599	A2	20011201		
	US 2001-11921	A1	20011206		

OS MARPAT 139:133563
GI

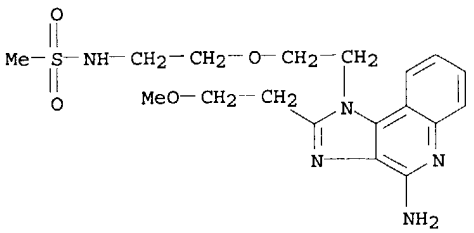


I

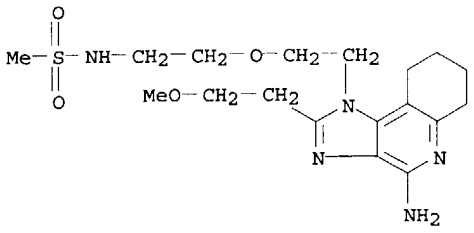
AB Title compds. [I; X = CHR5, CHR5, CHR5, R1 = R4NR3SO2R6A, R4NR3SOR7, R4NR3SO2NR5R6A, R4NR3SO2NH2; A = alkyl, alkenyl, aryl, heteroaryl, heterocyclyl; R2 = H, (substituted) alkyl, alkenyl, aryl, heteroaryl, heterocyclyl, alkyl-Y-alkyl, alkyl-Y-alkenyl, alkyl-Y-aryl; Y = O, S(O)0-2; R3 = H, alkyl, arylalkyl; R4 = alkyl, alkenyl, which may be interrupted by ≥1 O; R3R4 form a ring; R5 = H, alkyl, alkenyl; R6 = bond, alkyl, alkenyl, which may be interrupted by ≥1 O; R7 = alkyl; R3R7 form a ring; n = 0-4; R = alkyl, alkoxy, OH, halo, CF3], were prepared Thus, tert-Bu 2-[2-[(3-aminoquinolin-4-yl)amino]ethoxy]ethylcarbamate (preparation given) in CH2Cl2 was cooled to 0° and treated with Et3N and methoxypropionyl chloride; The reaction was then warmed to room temperature and stirring was continued for 1 h to give tert-Bu 2-[2-[2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethylcarbamate. This was converted to N-[2-[2-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]methanesulfonamide in several steps. I showed interferon induction in human cells with lowest effective concns. of 0.0001-1 μM.

IT **437382-50-8P**, N-[2-[2-[4-Amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]methanesulfonamide **437382-51-9P**, N-[2-[2-[4-Amino-2-(2-methoxyethyl)-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]methanesulfonamide **437382-52-0P**, N-[2-[2-[4-Amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]-N-methylmethanesulfonamide **437382-53-1P**, N-[2-[2-[4-Amino-2-(2-methoxyethyl)-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]-N-methylmethanesulfonamide **437382-55-3P 437382-56-4P 437382-58-6P 437382-61-1P 437382-75-7P 437382-89-3P 565454-55-9P 565454-56-0P 565454-57-1P 565454-58-2P 565454-59-3P 565454-60-6P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of sulfonamidoalkoxyalkylimidazoquinolines as immune response modulators)

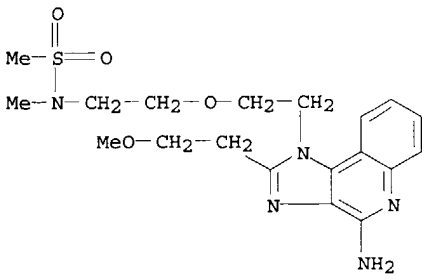
RN 437382-50-8 CAPLUS
CN Methanesulfonamide, N-[2-[2-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]- (9CI) (CA INDEX NAME)



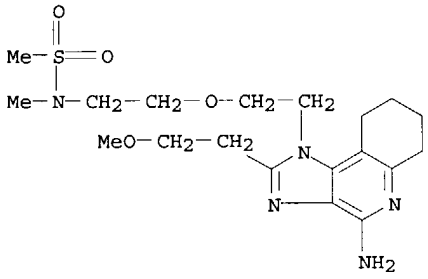
RN 437382-51-9 CAPLUS
CN Methanesulfonamide, N-[2-[2-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]- (9CI) (CA INDEX NAME)



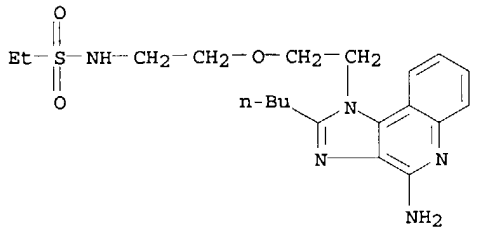
RN 437382-52-0 CAPLUS
CN Methanesulfonamide, N-[2-[2-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]-N-methyl- (9CI) (CA INDEX NAME)



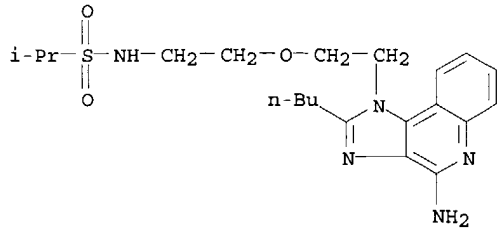
RN 437382-53-1 CAPLUS
CN Methanesulfonamide, N-[2-[2-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]-N-methyl- (9CI) (CA INDEX NAME)



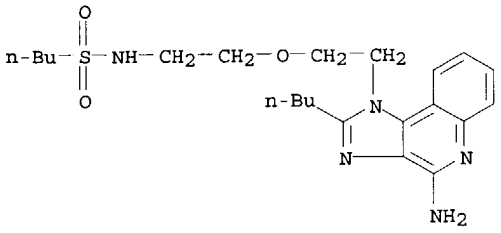
RN 437382-55-3 CAPLUS
CN Ethanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)



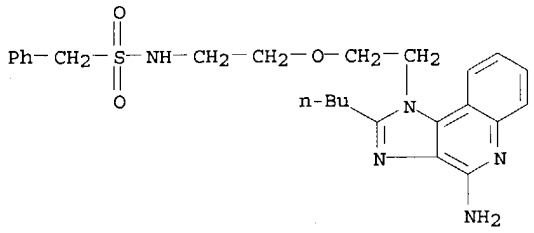
RN 437382-56-4 CAPLUS
CN 2-Propanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)



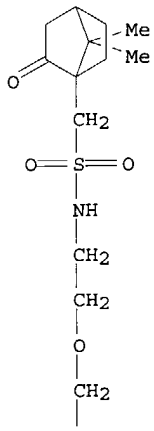
RN 437382-58-6 CAPLUS
CN 1-Butanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)

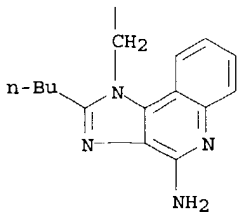


RN 437382-61-1 CAPLUS
CN Benzenemethanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)

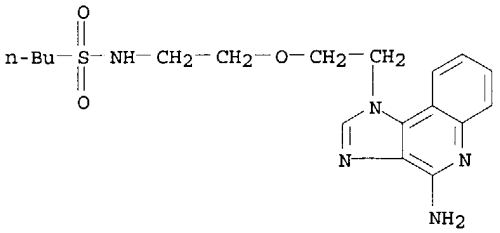


RN 437382-75-7 CAPLUS
CN Bicyclo[2.2.1]heptane-1-methanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]-7,7-dimethyl-2-oxo-, (1S,4R)- (9CI) (CA INDEX NAME)

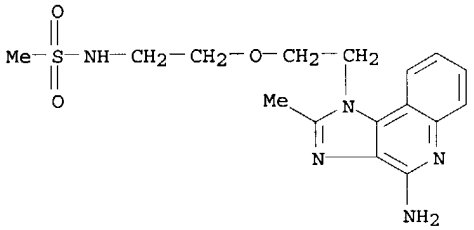




RN 437382-89-3 CAPLUS
CN 1-Butanesulfonamide, N-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)



RN 565454-55-9 CAPLUS
CN Methanesulfonamide, N-[2-[2-(4-amino-2-methyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)



RN 565454-56-0 CAPLUS
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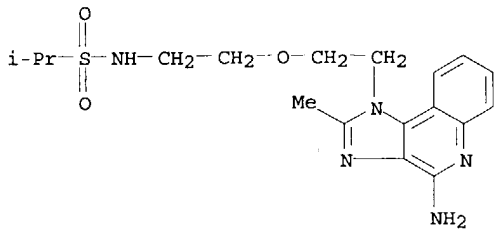

RN 565454-57-1 CAPLUS
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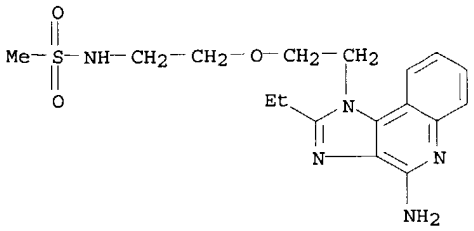
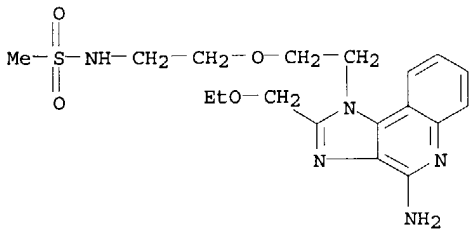
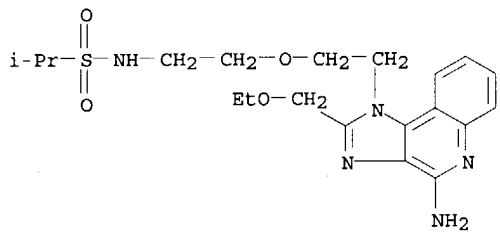


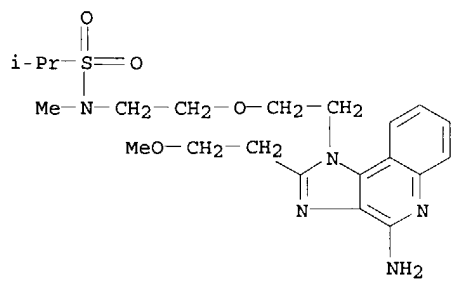
RN 565454-58-2 CAPLUS
CN Methanesulfonamide, N-[2-[2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]- (9CI) (CA INDEX NAME)



RN 565454-59-3 CAPLUS
CN 2-Propanesulfonamide, N-[2-[2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]- (9CI) (CA INDEX NAME)



RN 565454-60-6 CAPLUS
CN 2-Propanesulfonamide, N-[2-[2-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]-N-methyl- (9CI) (CA INDEX NAME)



L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:449681 CAPLUS
DN 137:33297
TI Preparation of sulfonamido ether substituted imidazoquinolines as immune response modifiers
IN Crooks, Stephen L.; Greisgraber, George W.; Heppner, Philip D.; Merrill, Bryon A.; Roberts, Ralph R.; Wei, Ai-Ping
PA 3M Innovative Properties Company, USA

10696478

SO PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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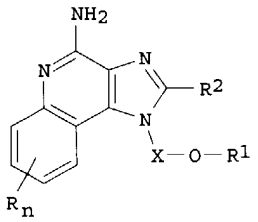
OS MARPAT 137:33297
GI

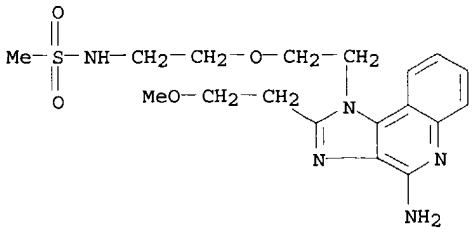


I

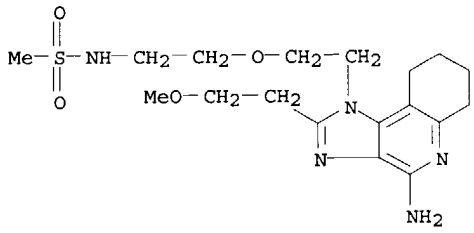
AB The title compds. [I; X = (CH2)2, (CH2)3, CHEtCH2, etc.; R1 = R4NR3SO2R6alkyl, R4NR3SO2R6aryl, etc.; R2 = H, alkyl, alkenyl, etc.; R3 = H, alkyl, aralkyl; R4 = alkylene or alkenylene interrupted by one or more O atoms; or R3R4 can join together to form a ring; R6 = a bond, alkylene or alkenylene which may be interrupted by one or more O atoms; n = 0-4; R = alkyl, alkoxy, OH, etc.] that contain substituted amine functionality at the 1-position, and are useful as immune response modifiers, were prepared E.g., a multi-step synthesis of I [X = (CH2)2; R1 = (CH2)2NMeSO2Me; R2 = (CH2)2OMe; n = 0] which showed the lowest concentration of 0.01 μM and 0.12 μM to induce interferon α and TNFα, resp., was given. The compds. I can induce the biosynthesis of various cytokines and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases.

IT **437382-50-8P 437382-51-9P 437382-52-0P**
437382-53-1P 437382-55-3P 437382-56-4P
437382-58-6P 437382-61-1P 437382-75-7P
437382-89-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of sulfonamido ether substituted imidazoquinolines as immune response modifiers)

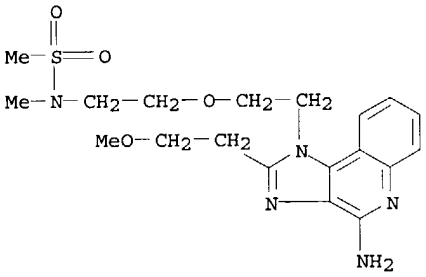
RN 437382-50-8 CAPLUS
CN Methanesulfonamide, N-[2-[2-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]- (9CI) (CA INDEX NAME)



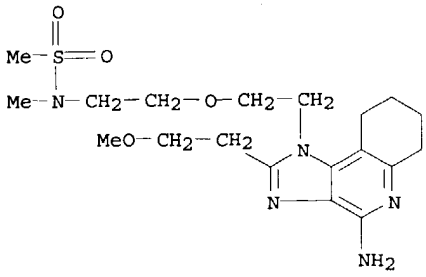
RN 437382-51-9 CAPLUS
CN Methanesulfonamide, N-[2-[2-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]- (9CI) (CA INDEX NAME)



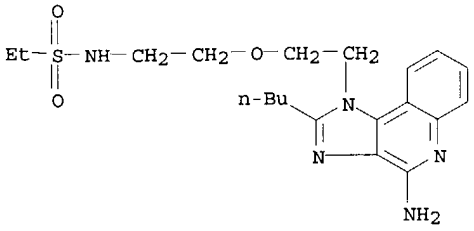
RN 437382-52-0 CAPLUS
CN Methanesulfonamide, N-[2-[2-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]-N-methyl- (9CI) (CA INDEX NAME)



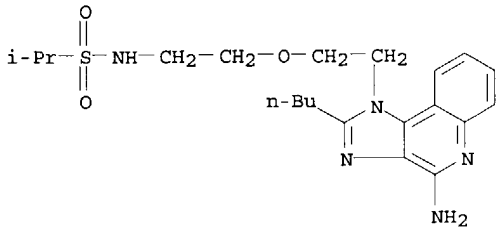
RN 437382-53-1 CAPLUS
CN Methanesulfonamide, N-[2-[2-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]-N-methyl- (9CI) (CA INDEX NAME)



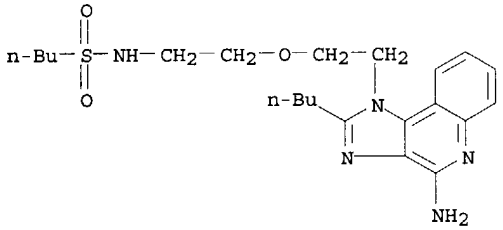
RN 437382-55-3 CAPLUS
CN Ethanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)



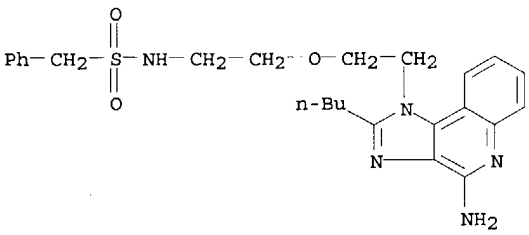
RN 437382-56-4 CAPLUS
CN 2-Propanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)



RN 437382-58-6 CAPLUS
CN 1-Butanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)

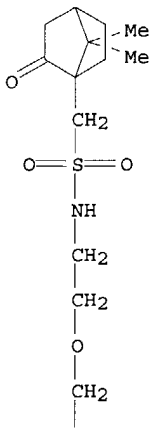


RN 437382-61-1 CAPLUS
CN Benzenemethanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)

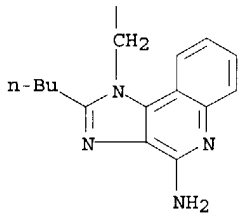


RN 437382-75-7 CAPLUS
CN Bicyclo[2.2.1]heptane-1-methanesulfonamide, N-[2-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]-7,7-dimethyl-2-oxo-, (1S,4R)- (9CI) (CA INDEX NAME)

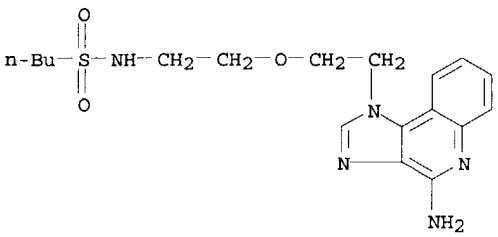
PAGE 1-A



PAGE 2-A



RN 437382-89-3 CAPLUS
CN 1-Butanesulfonamide, N-[2-[2-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethyl]- (9CI) (CA INDEX NAME)



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